

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

What is claimed is:

- 1 1. (Original) A method comprising:
2 importing environment information of a target database system into a test system, the
3 environment information comprising random sample statistics of the target database system;
4 storing the random sample statistics in a storage location; and
5 using the random sample statistics in performing query plan analysis for a given query in
6 the test system.
- 1 2. (Original) The method of claim 1, wherein importing the random sample statistics
2 comprises importing random sample statistics from a selected segment of the target database
3 system.
- 1 3. (Original) The method of claim 2, wherein the target database system comprises plural
2 access modules, wherein importing the random sample statistics comprises importing the random
3 sample statistics associated with less than all of the access modules.
- 1 4. (Original) The method of claim 3, wherein importing the random sample statistics
2 comprises importing the random sample statistics associated with a randomly selected one or
3 randomly selected ones of the access modules.
- 1 5. (Original) The method of claim 2, wherein importing the random sample statistics
2 comprises importing at least some of the following information: database name, base table
3 name, number of rows in the base table, number of indexes for the base table, minimum row
4 length in the base table, maximum row length in the base table, secondary index name, number
5 of rows in a secondary index table, and average row size of the secondary index table.

1 6. (Original) The method of claim 1, wherein importing the environment information
2 comprises importing the environment information of a target database system having plural
3 access modules that manage concurrent access of plural portions of data stored in the target
4 database system.

1 7. (Original) The method of claim 6, wherein importing the environment information further
2 comprises importing information pertaining to a configuration of the target database system.

1 8. (Original) The method of claim 6, wherein importing the environment information further
2 comprises importing cost-related information of the target database system.

1 9. (Original) The method of claim 7, wherein importing the cost-related information
2 comprises importing information comprising at least some of the following: number of nodes in
3 the target database system, number of CPUs per node, number of access modules per node, an
4 amount of memory allocated per access module, disk access speed, and network access speed.

1 10. (Currently Amended) The method of claim 1, further comprising emulating, in the test
2 system, an environment of the target database system using the random sample statistics, wherein
3 performing the query plan analysis comprises performing the query plan analysis in the emulated
4 environment.

1 11. (Original) The method of claim 10, wherein emulating the environment comprises
2 emulating the environment at one of plural emulation levels, the plural emulation levels
3 comprising a system level and a user session level.

1 12. (Original) The method of claim 10, further comprising generating a full set of statistics
2 from the random sample statistics.

1 13. (Original) The method of claim 12, further comprising invoking an optimizer to use the
2 full set of statistics to perform the query plan analysis.

1 14. (Original) The method of claim 1, further comprising using an SQL DIAGNOSTIC
2 statement to identify random sample statistics to capture.

1 15. (Original) The method of claim 14, further comprising using another SQL DIAGNOSTIC
2 statement to set random sample statistics in the storage location.

1 16. (Original) A test system comprising:
2 an interface to receive environment information associated with a target database system,
3 the environment information comprising at least one of the following: sample statistics collected
4 from a segment of the target database system, and cost-related information pertaining to a
5 configuration of the target database system;
6 a storage system to store the environment information; and
7 an optimizer adapted to determine a query plan in response to a given query in an
8 environment based on the environment information.

1 17. (Currently Amended) The database test system of claim 16, wherein the target database
2 system comprises plural access modules to manage respective portions of data stored in the target
3 database system, and wherein the sample statistics comprise sample statistics collected from less
4 than all the access modules in the target database system.

1 18. (Original) The test system of claim 17, wherein the sample statistics comprise sample
2 statistics collected from randomly selected one or more of the access modules.

1 19. (Original) The test system of claim 17, wherein the sample statistics comprise at least
2 some of the following information: database name, base table name, number of rows in the base
3 table, number of indexes for the base table, minimum row length in the base table, maximum row
4 length in the base table, secondary index name, number of rows in a secondary index table, and
5 average row size of the secondary index table.

1 20. (Original) The test system of claim 17, wherein the cost-related information comprises at
2 least some of the following information: number of nodes in the target database system, number
3 of CPUs per node, number of access modules per node, an amount of memory allocated per
4 access module, disk access speed, and network access speed.

1 21. (Original) The test system of claim 16, the storage subsystem to store a system table
2 containing the sample statistics.

1 22. (Original) The test system of claim 21, wherein the storage subsystem further comprises a
2 cache and a global configuration file, the test system further comprising a controller adapted to
3 load the sample statistics from the system table to one of the cache and global configuration file.

1 23. (Original) An article comprising at least one storage medium containing instructions that
2 when executed cause a system to:

3 extract random sample statistics from one or more tables of the target database system;

4 and

5 store the random sample statistics in a predetermined location for importing to a test
6 system to enable emulation of an environment of the database system.

1 24. (Original) The article of claim 23, wherein the instruction when executed cause the
2 system to present a graphical user interface having plural input elements activable by a user to
3 perform the export and import tasks.

1 25. (Original) The article of claim 24, wherein the instructions when executed cause the
2 system to issue a first SQL DIAGNOSTIC statement to the target database to extract random
3 sample statistics from a segment of the target database system.

1 26. (Original) The article of claim 25, wherein the instructions when executed cause the
2 system to issue a second SQL DIAGNOSTIC statement to set the exported random sample
3 statistics in a storage location of a test system.

1 27. (Original) The article of claim 24, wherein the instructions when executed cause the
2 system to:

3 present a screen displaying the random sample statistics; and

4 accept user input to edit the random sample statistics.

1 28. (Original) The article of claim 23, wherein the instructions when executed cause the
2 system to extract cost-related information pertaining to a configuration of the target database
3 system.

1 29. (Original) The article of claim 28, wherein the cost-related information comprises at least
2 some of the following information: number of nodes in the target database system, number of
3 CPUs per node, number of access modules per node, an amount of memory allocated per access
4 module, disk access speed, and network access speed.

1 30. (Original) An article comprising at least one storage medium containing instructions that
2 when executed cause a system to:
3 import random sample statistics of a target database system;
4 store the random sample statistics in a storage location;
5 generate a full set of statistics from the random sample statistics; and
6 use the full set of statistics in selecting a query plan in response to a given query.

1 31. (Original) The article of claim 30, wherein the instructions when executed cause the
2 system to invoke an optimizer to use the full set of statistics in selecting the query plan.

1 32. (New) The test system of claim 16, further comprising a controller to emulate, in the test
2 system, an environment of the target database system based on the environment information,
3 wherein the optimizer is adapted to determine the query plan in the emulated
4 environment.

1 33. (New) The article of claim 30, wherein the instructions when executed cause the system
2 to:
3 import cost-related information of the target database system;
4 emulate an environment of the target database system based on the random sample
5 statistics and cost-related information of the target database system,
6 wherein using the full set of statistics in selecting the query plan is performed in the
7 emulated environment.